

AMENDMENTS TO THE CLAIMS

Please amend claims 1-3, and add new claims 21-25. No new matter is believed to be introduced as a result of the aforementioned amendments and new claims. The following list of claims replaces all previous claim listings in this case.

1. **(Currently amended)** ~~An electrochromic-optical attenuator~~ optical device, comprising:
 ~~at least one~~ a polarizing element having an optical polarization axis, wherein the polarizing element transmits a portion of a light signal proportional to the angular difference between ~~the~~ an optical polarization axis of the light signal and ~~that~~ an optical polarization axis of the polarizing element; and
 a variable electrochromic optical attenuator comprising:
 ~~a semi-transparent~~ an electrochromic device; and
 a plurality pair of electrodes ~~configured to conduct electricity to in~~ electrical communication with the electrochromic device such that the relative transparency of the electrochromic device ~~will be affected by an amount proportional~~ corresponds to the magnitude of ~~the electricity applied to a voltage applied across~~ the plurality pair of electrodes;
 wherein ~~the~~ a relative intensity of the light signal transmitted ~~through out of~~ the electrochromic device ~~is affected by an amount proportional~~ corresponds to the magnitude of ~~the electricity applied to the voltage applied across~~ the plurality pair of electrodes.
2. **(Currently amended)** The optical ~~attenuator~~ device of claim 1, wherein the polarizing element comprises a polarizer having a linear optical polarity.

3. **(Currently amended)** A laser package comprising:
a laser configured to generate a light signal having an optical polarization axis;
a variable electrochromic optical attenuator comprising:
 ~~a semi-transparent~~ an electrochromic device; and
 ~~a plurality pair of electrodes configured to conduct electricity to in electrical communication with~~ the electrochromic device such that the relative transparency of the electrochromic device ~~will be affected by an amount proportional~~ corresponds to the magnitude of ~~the electricity applied to a voltage applied across~~ the plurality pair of electrodes, wherein ~~the~~ a relative intensity of the light signal transmitted ~~through out of~~ the ~~semi-transparent~~ electrochromic device ~~will also be affected by an amount proportional~~ corresponds to the magnitude of the ~~electricity applied to voltage applied across~~ the plurality pair of electrodes; and
 ~~at least one~~ a polarizing element having an optical polarization axis, wherein the polarizing element transmits a portion of the light signal proportional to the angular difference between the optical polarization axis of the light signal and ~~that~~ the optical polarization axis of the polarizing element.
4. **(Original)** The laser package of claim 3, wherein the laser comprises a semiconductor laser or a gas laser.
5. **(Original)** The laser package of claim 3, wherein the laser comprises a distributed feedback laser.
6. **(Original)** The laser package of claim 3, wherein the polarizing element comprises a polarizer having a linear optical polarity.
7. **(Original)** The laser package of claim 3, further comprising a window or lens interposed between the laser and the variable electrochromic optical attenuator.

8. **(Previously Presented)** The laser package of claim 3 further comprising an optical transceiver package.

9. **(Original)** A laser package for optical attenuation and isolation, comprising:
- a laser configured to generate a light signal having an optical polarization axis;
 - a variable electrochromic optical attenuator comprising:
 - a semi-transparent electrochromic device; and
 - a plurality of electrodes configured to conduct electricity to the electrochromic device such that the transparency of the electrochromic device will be affected by an amount proportional to the magnitude of the electricity applied to the plurality of electrodes, wherein the intensity of the light signal transmitted through the semi-transparent electrochromic device will also be affected by an amount proportional to the magnitude of the electricity applied to the plurality of electrodes;
 - a first polarizing element in optical communication with the electrochromic optical attenuator and having an optical polarization axis, wherein the first polarizing element transmits a portion of the light signal proportional to the angular difference between the optical polarization axis of the light signal and that of the first polarizing element;
 - a faraday rotator in optical communication with the first polarizing element and comprising:
 - a semi-transparent material; and
 - a magnetic material at least partially surrounding the semi-transparent material and configured to apply a magnetic force to a light signal that is passed through the semi-transparent material; and
 - a second polarizing element in optical communication with the faraday rotator and having an optical polarization axis, wherein the second polarizing element transmits a portion of an incident light signal proportional to the angular difference between an optical polarization axis of the incident light signal and that of the second polarizing element.

10. **(Original)** The laser package of claim 9, wherein the laser comprises a semiconductor laser or a gas laser.

11. **(Original)** The laser package of claim 9, wherein the laser comprises a distributed feedback laser.

12. **(Original)** The laser package of claim 9, wherein the polarizing elements each comprise a polarizer having a linear optical polarity.

13. **(Original)** The laser package of claim 9, wherein the semi-transparent material comprises garnet.

14. **(Original)** The laser package of claim 9, wherein the magnetic material of the faraday rotator comprises a permanent magnet or a premagnetized hard ferromagnetic material.

15. **(Original)** The laser package of claim 9, further comprising a window or lens interposed between the laser and the variable electrochromic optical attenuator.

16. **(Previously Presented)** The laser package of claim 9 further comprising an optical transceiver package.

17. **(Original)** A method of attenuating and isolating a light signal, comprising:
directing a light signal from a laser to a variable electrochromic optical attenuator, the electrochromic optical attenuator comprising:
a semi-transparent electrochromic device; and
a plurality of electrodes configured to conduct electricity to the electrochromic device such that the transparency of the electrochromic device will be affected by an amount proportional to the magnitude of the electricity applied to the plurality of electrodes;
transmitting at least a portion of the light signal through the electrochromic device, wherein the intensity of the light signal transmitted through the electrochromic device is affected by an amount proportional to the magnitude of the electricity applied to the plurality of electrodes;
directing the light signal from the electrochromic device to a first polarizing element;
directing the light signal from the first polarizing element to a faraday rotator, the faraday rotator comprising:
a semi-transparent material; and
a magnetic material at least partially surrounding the semi-transparent material;
and directing the light signal from the faraday rotator to a second polarizing element.
18. **(Original)** The method of claim 17, wherein the laser comprises a semiconductor laser or a gas laser.
19. **(Original)** The method of claim 17, wherein the laser comprises a distributed feedback laser.
20. **(Original)** The method of claim 17, wherein the polarizing elements each comprise a polarizer having a linear optical polarity.

21. (New) An optical transceiver, comprising:
a housing; and
a module attached to the housing and comprising:
a printed circuit board;
an optical receiver in communication with the printed circuit board; and
an optical transmitter package in communication with the printed circuit board
and comprising:
an optical transmitter;
a variable electrochromic optical attenuator arranged to receive an
optical signal from the optical transmitter;
a first polarizing element arranged to receive an optical output from the
variable electrochromic optical attenuator;
a rotator arranged to receive an optical output from the first polarizing
element; and
a second polarizing element configured to receive an optical output from
the rotator.
22. (New) The optical transceiver as recited in claim 21, wherein the optical transmitter
comprises a laser.
23. (New) The optical transceiver as recited in claim 21, wherein the rotator comprises a
Faraday rotator.
24. (New) The optical transceiver as recited in claim 21, wherein an input to the variable
electrochromic optical attenuator has the same polarization as a corresponding output from the variable
electrochromic optical attenuator.

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25. (New) The optical transceiver as recited in claim 21, wherein a relative intensity of an optical output of the variable electrochromic optical attenuator corresponds to the magnitude of a voltage applied to the variable electrochromic optical attenuator.